

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 22

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte KRZYSZTOF GURNE, RAYMOND J. WILLIAMS, JOHN R. BOLDT, ROBERT L. BARKER, GREGORY J. BRONIAK and DANIEL J. MARUS

Appeal No. 1997-2049
Application 08/431,130

ON BRIEF

Before COHEN, STAAB, and NASE, Administrative Patent Judges.
STAAB, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the examiner's final rejection of claims 3-19, all the claims currently pending in the application.

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Appellants' invention pertains to a service tool (claims 3-18) and method (claim 19) for monitoring operation of a vehicle and for diagnosing problems with the operation of the vehicle. Independent claims 3 and 19, copies of which are found in an appendix to appellants' brief, are representative of the appealed subject matter.

The references of record relied upon by the examiner in support of a rejection under 35 U.S.C. § 103 are:

Boscove et al (Boscove)	4,796,206	Jan. 3, 1989
Abe et al (Abe)	4,975,847	Dec. 4, 1990

Claims 3-19 stand rejected under 35 U.S.C. § 103 as being unpatentable over Abe in view of Boscove.

Reference is made to appellants' main and reply briefs (Paper Nos. 13 and 15) and to the examiner's answer (Paper No. 14) for the respective positions of appellants and the examiner regarding the merits of these rejections.

Opinion

Having carefully considered appellants' specification and claims, the teachings of the applied references, and the

respective positions expressed by appellants and the examiner, it is our determination that the standing § 103 rejection of claims 3-19 should not be sustained. Our reasons follow.

According to appellants (specification, pages 1-2), it is conventional in the automotive service industry to employ an auxiliary diagnostic tool known as a scan tool, typically hand held, to interface with the on-board controller of a vehicle to aid in diagnosing problems. An alleged problem with known scan tools is their inability to accommodate a wide variety of automobile models without requiring substantial hardware and software modification. Appellants' solution to this alleged problem is to provide an off-board master controller "to interface to the scan tool and provide[] sophisticated updating and diagnostic capabilities not feasible to include in the scan tool itself" (specification, page 3). This solution is reflected in independent claim 3 by claim language calling for a service tool comprising (1) an off-board master controller having a processor and memory means, and (2) a hand held tool having (a) memory and processing means, (b) a first

communication port for interfacing the hand held tool with the vehicle's on-board controller, and (c) a second communication port for interfacing the hand held tool with the off-board master controller. Independent claims 16 and 19 contain similar language.

Abe, the examiner's primary reference, pertains to a diagnosis system for a motor vehicle comprising a hand held computerized tool 25, a cable 27 for interfacing the tool with the on-board controller of the vehicle, and a plurality of memory cartridges 34 that may be individually plugged into a connector port 33 of the tool. The memory cartridges include ROM 41 which stores a plurality of programs for diagnosing the on-board controller of the vehicle (column 3, lines 6-8). Although not expressly stated, it appears that selection of a particular memory cartridge is based on the type of diagnostic test desired and/or the particular automobile model being diagnosed (see column 2, lines 18-20; column 3, lines 49-51).

Boscove relates to a computer assisted vehicle servicing

system. In an assembly line environment, an off-board technician terminal 100 interfaces with a vehicle's on-board controller 102 and executes programs that prompt a technician to change vehicle states. For each change of vehicle state, vehicle operating parameters are sensed and compared against known good parameters stored in a data base 104 (column 2, lines 9-17). In a service environment, where more time is available than at the end of an assembly line, a stand alone service environment version of the technician terminal executes enhanced versions of the programs executed in the assembly line environment to provide detection capabilities of more vehicle problems (column 2, lines 18-26). Figure 3 illustrates a technician terminal housed in a console 140 mounted on wheels 141 for greater mobility. Console 140 includes monitor 142, a keyboard (not shown), a printer 144, and various drawers for storing cables and the like (column 5, lines 2-10).

In rejecting the appealed claims as being unpatentable over Abe in view of Boscove, the examiner concedes that Abe does not provide an off-board master controller. The examiner

contends, however, that

[t]he suggestion [teachings?] of the Boscove et al. patent in at least figure 3-4, 11 and the related text would have motivated one of ordinary skill in the art to modify the teaching [system?] of Abe et al. by incorporating the off-board controller including memory means as taught by Boscove into the teaching [system?] of Abe et al. . . . [Answer, page 4.]

At the outset, it is not entirely clear to us whether the examiner proposes substituting an off-board system of the type shown in Boscove for the memory cartridges of Abe, or supplementing Abe's memory cartridges by adding an off-board system like that of Boscove to the system of Abe. In either case, the examiner's position is not well taken. In brief, the difficulty we have with the rejection is the failure of the applied references, taken either singly or collectively, to teach or suggest a vehicle diagnostic tool that includes both a hand held tool and an off-board master controller that are connected together to work in tandem. Clearly, the Boscove system does not include a hand held tool having a processor and memory means. As for Abe, while we appreciate that the memory of the hand held tool thereof is ungraded or augmented by a selected one of the plurality of memory

cartridges 34, we do not regard Abe's memory cartridges as being akin to, or suggesting the use of, an additional "off-board master controller" including a processor and memory means, as called for in each of the independent claims on appeal. Stated differently, we fail to see how the fact that Abe utilizes a memory cartridge to upgrade the memory of the hand held tool would have suggested interfacing Abe's hand held tool with an off-board system such as that shown in Boscove at console 140. From our perspective, one of ordinary skill in the art would have viewed Abe and Boscove as representing alternative ways of providing a computerized vehicle diagnostic system, rather than teaching or suggesting the incorporation of features from one system into the other to enhance performance in the manner set forth in the rejection.

For the reasons discussed above, we fail to perceive any teaching, suggestion or incentive which would have led one of ordinary skill in the art to modify the Abe system by

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incorporating an off-board system like the console 140 of Boscove therein, as required by the appealed claims, other than the hindsight provided to one who first views the appellants' disclosure. Hindsight reconstruction, however, is not a proper basis for establishing the obviousness of the subject matter of claims. See *In re Fritch*, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992). It follows that we will not sustain the standing § 103 rejection.

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The decision of the examiner is reversed.

Reversed

IRWIN CHARLES COHEN)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
LAWRENCE J. STAAB)	
Administrative Patent Judge)	APPEALS AND
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JEFFREY V. NASE)	
Administrative Patent Judge)	

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